Egdell, R.G., see Wee 442 (1999) 55
Ekedahl, L.-G., see Amandusson 442 (1999) 199
Ekstrom, B., see Addepalli 442 (1999) 385
Elesin, V.F. and L.A. Openov, Clusters of interstitial carbon atoms near the graphite surface as a possible origin of dome-like features observed by scanning tunneling microscopy 442 (1999) 131
Elsayed-Ali, H.E., see Zeng 442 (1999) L977
Elsenaar, J.W., see Roosendaal 442 (1999) 329
Ertl, G., see Zei 442 (1999) 19

Fadley, C.S., see Ynzunza 442 (1999) 27
Feidenhans'l, R., see Nielsen 442 (1999) L989
Finetti, P., see D'Addato 442 (1999) 74
Finocchi, F., see Pojani 442 (1999) 179
Fishlock, T.W., see Wee 442 (1999) 55
Fitting, H.-J., see Klar 442 (1999) 477
Foord, J.S., see Wee 442 (1999) 55
Forbeaux, I., J.-M. Themlin and J.-M. Debever, High-temperature graphitization of the 6H-SiC (000$\bar{1}$) face 442 (1999) 9
Frank, M., see Andersson 442 (1999) L964
Freund, H.-J., see Andersson 442 (1999) L964
Fukuda, T., Initial surface reconstructions on solid-phase homo-epitaxially grown amorphous silicon overlayers on Si(111)-7 × 7 surface 442 (1999) 107
Fukuda, Y., M. Shimomura, G. Kaneda, N. Sanada, V.G. Zavodinsky, I.A. Kuyanov and E.N. Chukurov, Scanning tunneling microscopy, high-resolution electron energy loss spectroscopy, and theoretical studies of trimethylphosphine (TMP) on a Si(111)-(7 × 7) surface 442 (1999) 507
Fukutani, H., see Yagi 442 (1999) 307

García-Hernández, M., see Márquez 442 (1999) 463
Gierer, M., see Iglesias 442 (1999) 357
Giertz, A., see Andersson 442 (1999) L964
Giesen, M., Scaling transition of the time dependence of step fluctuations on Cu(111) 442 (1999) 543
Glaefeke, H., see Klar 442 (1999) 477
Gloege, Th., see Meyerheim 442 (1999) L1029
Gorostiza, P., see Sangwal 442 (1999) 161
Grey, F., see Nielsen 442 (1999) L989
Gurevich, A.B., B.E. Bent, A.V. Teplyakov and J.G. Chen, A NEXAFS investigation of the formation and decomposition of CuO and Cu_2O thin films on Cu(100) 442 (1999) L971

Habraken, F.H.P.M., see Roosendaal 442 (1999) 329
Hądzel, P., T. Radoń, M.J.G. Lee and J.C.L. Chow, Surface density of states on the (0001) face of titanium 442 (1999) 36
Hasegawa, S., see Sato 442 (1999) 65
Hattori, K., see Kushida 442 (1999) 300
Henry, R.L., see Bellitto 442 (1999) L1019
Hishita, S., see Suzuki 442 (1999) 291
Hitchcock, A.P., see Lu 442 (1999) L948
Hollering, M., F. Maier, N. Sieber, M. Stammler, J. Ristein, L. Ley, A.P.J. Stampfl, J.D. Riley, R.C.G. Leckey, F.P. Leisenberger and F.P. Netzer, Electronic states of an ordered oxide on C-terminated 6H–SiC 442 (1999) 531
Hou, J.G., see Wang 442 (1999) L1024
Howes, P.B., see Nielsen 442 (1999) L989
Hu, Z.-M., K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90
Hüfner, S., see Müller 442 (1999) 485
Hussain, Z., see Ynzunza 442 (1999) 27

Iacobucci, S., see Sacchi 442 (1999) 349
Iglesias, A., M. Gierer, D. Wolf and W. Moritz, Ordering of subsurface interstitial atoms in the Ge(113) surface studied by SPA-LEED 442 (1999) 357
Iimori, T., see Kushida 442 (1999) 300
Illas, F., see Márquez 442 (1999) 463
Ishikawa, M., see Okita 442 (1999) L959

J.N. Russell, Jr., see Bartlett 442 (1999) 265
Jirsak, T., see Rodriguez 442 (1999) 400
Jones, R.G., see Turton 442 (1999) 517

Kadodwala, M., see Turton 442 (1999) 517
Kahng, S.-J., J.-Y. Park and Y. Kuk, Kinetics processes in the growth and decomposition of a two-dimensional binary alloy 442 (1999) 379
Kaneda, G., see Fukuda 442 (1999) 507
Karunamuni, J., R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223
Kelber, J.A., see Addepalli 442 (1999) 385
Kelson, I., see Ashkenazy 442 (1999) L1001
Kiguchi, M., see Terada 442 (1999) 141
King, B.V., see Bilić 442 (1999) 256
Kitajima, Y., see Terada 442 (1999) 141
Kjørsvik, T., see Weierstall 442 (1999) 239
Klar, F., J. Bansmann, H. Glaefeke, H.-J. Fitting and K.-H. Meiwes-Broer, Exoelectron emission from magnesium surfaces 442 (1999) 477
Klivényi, G., I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
Kokko, K., see Trushin 442 (1999) 420
Koleske, D.D., see Bellitto 442 (1999) L1019
Komori, F., see Kushida 442 (1999) 300
Kovács, I., see Klivényi 442 (1999) 115
Krout, R., see Singh 442 (1999) 442
Kruchinin, V.N., see Aliev 442 (1999) 206

Kuhn, M., see Rodriguez 442 (1999) 400
Kuk, Y., see Kahng 442 (1999) 379
Kurtz, R.L., see Karunamuni 442 (1999) 223
Kushida, K., K. Hattori, S. Arai, T. Iimori and F. Komori, Initial stage of Ag growth on Ge(001) surfaces at room temperature 442 (1999) 300
Kuyanov, I.A., see Fukuda 442 (1999) 507

Langford, S.C., see Bandis 442 (1999) 413
Leckey, R.C.G., see Hollering 442 (1999) 531
Lee, M.J.G., see Hądzel 442 (1999) 36
Leisenberger, F.P., see Hollering 442 (1999) 531
Lennartz, M., P. Broekmann, M. Arenz, C. Stuhlmann and K. Wandelt, Sulfate adsorption on Cu(111) studied by in-situ IRRAS and STM: revealing the adsorption site and desorption behavior 442 (1999) 215
Ley, L., see Hollering 442 (1999) 531
Li, Q., see Wang 442 (1999) L1024
Libuda, J., see Andersson 442 (1999) L964
Lin, J.-S., see Addepalli 442 (1999) 385
Lopez, N., see Márquez 442 (1999) 463
Lu, Z.H., T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

Madix, R.J., see Biener 442 (1999) 47
Magtoto, N.P., see Addepalli 442 (1999) 385
Maier, F., see Hollering 442 (1999) 531
Maltor, H., see Meyerheim 442 (1999) L1029
Markowski, L., Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939
Márquez, A.M., N. Lopez, M. García-Hernández and F. Illas, Similarities and differences in the Hartree–Fock and density-functional description of the chemisorption bond 442 (1999) 463
Mårtensson, N., see Andersson 442 (1999) L964
Maxwell, A.J., see Andersson 442 (1999) L964
McLure, I.A. and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374
Meiwes-Broer, K.-H., see Klar 442 (1999) 477
Meyerheim, H.L., Th. Gloege and H. Maltor, Surface X-ray diffraction on large organic molecules: thiouracil on Ag(111) 442 (1999) L1029
Minoda, H., see Nishimura 442 (1999) L1006
Mirone, A., see Sacchi 442 (1999) 349
Mitome, M., In-situ observation of melting of fine lead particles by high-resolution electron microscopy 442 (1999) L953
Miura, K., see Okita 442 (1999) L959
Mola, E.E., see Ranea 442 (1999) 498
Morais, J., see Ynzunza 442 (1999) 27
Moritz, W., see Iglesias 442 (1999) 357
Müller, F., P. Steiner, Th. Straub, D. Reinicke, S. Palm, R. de Masi and S. Hüfner, Full hemispherical intensity maps of crystal field transitions in NiO(001) by angular resolved electron energy loss spectroscopy 442 (1999) 485

Nagao, T., see Sato 442 (1999) 65
Nakatsuji, H., see Hu 442 (1999) 90
Naumovets, A.G., see Yakovkin 442 (1999) 81
Nejoh, H., see Ohgi 442 (1999) 277
Netzer, F.P., see Hollering 442 (1999) 531
Nielsen, M., R. Feidenhans'l, P.B. Howes, J. Vedde, K. Rasmussen, M. Benamara and F. Grey, The interface structure in directly bonded silicon crystals studied by synchrotron X-ray diffraction 442 (1999) L989
Nishimura, H., H. Minoda, Y. Tanishiro and K. Yagi, DC heating-induced step instability on Si(001) vicinal surfaces 442 (1999) L1006
Noguera, C., see Pojani 442 (1999) 179

O'Connor, D.J., see Bilić 442 (1999) 256
Ohgi, T., H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277
Ohta, T., see Terada 442 (1999) 141
Okamoto, Y., see Terada 442 (1999) 141
Okita, S., M. Ishikawa and K. Miura, Nanotribological behavior of C_{60} films at an extremely low load 442 (1999) L959
Openov, L.A., see Elesin 442 (1999) 131
Oyoshi, K., see Suzuki 442 (1999) 291

Palm, S., see Müller 442 (1999) 485
Palomares, F.J., see Ynzunza 442 (1999) 27
Pantelides, S.T., see Yan 442 (1999) 251
Park, J.-Y., see Kahng 442 (1999) 379
Pennycook, S.J., see Yan 442 (1999) 251
Pethica, J.B., see Wee 442 (1999) 55
Pojani, A., F. Finocchi and C. Noguera, Polarity on the $SrTiO_3$ (111) and (110) surfaces 442 (1999) 179
Potzger, K., see Ashkenazy 442 (1999) L1001

Quail (née Clements), P.J., see McLure 442 (1999) 374

Radoń, T., see Hądzel 442 (1999) 36
Rak, M., Transient behaviour of surface supersaturation caused by variation in bulk supersaturation 442 (1999) 149
Ranea, V.A., J.L. Vicente, E.E. Mola and R. Uyewa Mananu, A theoretical study of water chemisorption on the (001) plane of V_2O_5 442 (1999) 498
Rasmussen, K., see Nielsen 442 (1999) L989
Reinicke, D., see Müller 442 (1999) 485
Riley, J.D., see Hollering 442 (1999) 531
Ristein, J., see Hollering 442 (1999) 531
Rodriguez, J.A., T. Jirsak, S. Chaturverdi and M. Kuhn, Reaction of SO_2 with ZnO(000$\bar{1}$)–O and ZnO powders: photoemission and XANES studies on the formation of SO_3 and SO_4 442 (1999) 400
Roosendaal, S.J., B. van Asselen, J.W. Elsenaar, A.M. Vredenberg and F.H.P.M. Habraken, The oxidation state of Fe(100) after initial oxidation in O_2 442 (1999) 329

Sacchi, M., A. Mirone and S. Iacobucci, Soft X-ray resonant magnetic scattering from thin Ni layers on Cu(110) 442 (1999) 349
Salo, P.T., see Trushin 442 (1999) 420
Sanada, N., see Fukuda 442 (1999) 507
Sandell, A., see Andersson 442 (1999) L964
Sangwal, K., P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161
Sanz, F., see Sangwal 442 (1999) 161
Sato, M. and M. Uwaha, Growth of step bunches formed by the drift of adatoms 442 (1999) 318
Sato, N., T. Nagao and S. Hasegawa, Si(111)-($\sqrt{3} \times \sqrt{3}$)-Ag surface at low temperatures: symmetry breaking and surface twin boundaries 442 (1999) 65
Sautet, P., see Delbecq 442 (1999) 338
Scudiero, L., see Bandis 442 (1999) 413
Sekiba, D., see Yagi 442 (1999) 307
Sheng, H.-Y., see Ohgi 442 (1999) 277
Shimomura, M., see Fukuda 442 (1999) 507
Sibener, S.J., see Slezak 442 (1999) L983
Sieber, N., see Hollering 442 (1999) 531
Singh, N.K. and R. Krout, Thermal and electron-induced reactions of $AsCl_3$ on GaAs(100) 442 (1999) 442
Slezak, J.A., B.D. Zion and S.J. Sibener, Enhanced oxidation rate of Ni(111) by atomic oxygen 442 (1999) L983
Solymosi, F., see Klivényi 442 (1999) 115
Souda, R., see Suzuki 442 (1999) 283
Souda, R., see Suzuki 442 (1999) 291
Spence, J.C.H., see Weierstall 442 (1999) 239
Stammler, M., see Hollering 442 (1999) 531
Stampfl, A.P.J., see Hollering 442 (1999) 531
Steiner, P., see Müller 442 (1999) 485
Stockbauer, R.L., see Karunamuni 442 (1999) 223
Straub, Th., see Müller 442 (1999) 485
Stuhlmann, C., see Lennartz 442 (1999) 215
Suzuki, T. and R. Souda, Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS) 442 (1999) 283
Suzuki, T., S. Hishita, K. Oyoshi and R. Souda, Initial stage growth mechanisms of metal adsorbates – Ti, Zr, Fe, Ni, Ge, and Ag – on MgO(001) surface 442 (1999) 291

Takahashi, K., see Hu 442 (1999) 90
Tanishiro, Y., see Nishimura 442 (1999) L1006
Teplyakov, A.V., see Gurevich 442 (1999) L971
Terada, S., T. Yokoyama, Y. Okamoto, M. Kiguchi, Y. Kitajima and T. Ohta, SO_2 adsorption on thin Pd/Ni(111) films studied by X-ray absorption fine structure spectroscopy 442 (1999) 141
Themlin, J.-M., see Forbeaux 442 (1999) 9
Thoms, B.D., see Bellitto 442 (1999) L1019
Tober, E.D., see Ynzunza 442 (1999) 27
Trushin, O.S., K. Kokko and P.T. Salo, Film–substrate interface mixing in the energetic deposition of Ag on Cu(001) 442 (1999) 420
Turton, S., M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517
Tyliszczak, T., see Lu 442 (1999) L948

Uvdal, P., see Åsmundsson 442 (1999) L1013
Uwaha, M., see Sato 442 (1999) 318
Uyewa Mananu, R., see Ranea 442 (1999) 498

Valdisera, J.M., see Bartlett 442 (1999) 265
Van Asselen, B., see Roosendaal 442 (1999) 329
Van Hove, M.A., see Ynzunza 442 (1999) 27
Vedde, J., see Nielsen 442 (1999) L989
Vicente, J.L., see Ranea 442 (1999) 498
Vredenberg, A.M., see Roosendaal 442 (1999) 329

Wandelt, K., see Lennartz 442 (1999) 215
Wang, B., see Wang 442 (1999) L1024
Wang, H., C. Zeng, Q. Li, B. Wang, J. Yang, J.G. Hou and Q. Zhu, Scanning tunneling spectroscopy of individual C_{60} molecules adsorbed on Si(111)-7 × 7 surface 442 (1999) L1024
Wang, J., see Biener 442 (1999) 47
Wang, Z., see Ynzunza 442 (1999) 27
Weber, A., see Ashkenazy 442 (1999) L1001
Wee, A.T.S., R.A. Dixon, R.G. Egdell, J.S. Foord, T.W. Fishlock and J.B. Pethica, Scanning tunnelling microscopy study of palladium on stepped Cu(210) surfaces: chemical contrast and room-temperature tip-induced motion 442 (1999) 55
Weierstall, U., J.M. Zuo, T. Kjørsvik and J.C.H. Spence, Convergent-beam RHEED in a dedicated UHV diffraction camera and applications to Si reconstructed surfaces 442 (1999) 239
Wickenden, A.E., see Bellitto 442 (1999) L1019
Wolf, D., see Iglesias 442 (1999) 357
Woodruff, D.P., see Driver 442 (1999) 1

Yagi, K., see Nishimura 442 (1999) L1006
Yagi, K., D. Sekiba and H. Fukutani, Adsorption and desorption kinetics of oxygen on the Pd(110) surface 442 (1999) 307
Yakovkin, I.N., V.I. Chernyi and A.G. Naumovets, Oxidation of CO on Li-precovered Pt 442 (1999) 81
Yakovkin, I.N., Non-metal-to-metal transition in alkaline earth monolayers 442 (1999) 431
Yan, Y., M.F. Chisholm, S.J. Pennycook and S.T. Pantelides, Structures of pure and Ca-segregated MgO(001) surfaces 442 (1999) 251
Yang, J., see Wang 442 (1999) L1024
Yang, W.S., see Zhao 442 (1999) L995
Yang, Y., see Bellitto 442 (1999) L1019
Ynzunza, R.X., F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1 × 1) oxygen on W(110) from full solid angle photoelectron diffraction with chemical-state resolution 442 (1999) 27
Yokoyama, T., see Terada 442 (1999) 141

Zavodinsky, V.G., see Fukuda 442 (1999) 507
Zei, M.S. and G. Ertl, On the structural transformation of the reconstructed Pt(100) in electrolyte solutions 442 (1999) 19
Zeitz, W.-D., see Ashkenazy 442 (1999) L1001
Zeng, C., see Wang 442 (1999) L1024
Zeng, X. and H.E. Elsayed-Ali, Surface thermal expansion of Ge(111) 442 (1999) L977
Zhao, R.G., see Zhao 442 (1999) L995
Zhao, X., R.G. Zhao and W.S. Yang, Adsorption of alanine on Cu(001) studied by scanning tunneling microscopy 442 (1999) L995
Zhu, Q., see Wang 442 (1999) L1024
Zion, B.D., see Slezak 442 (1999) L983
Zuo, J.M., see Weierstall 442 (1999) 239

ELSEVIER

Surface Science 442 (1999) 555–563

surface science

www.elsevier.nl/locate/susc

Subject index

THEORETICAL METHODS, MODELS AND TECHNIQUES

Ab initio quantum chemical methods and calculations

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

Z.-M. Hu, K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90

R. Ásmundsson and P. Uvdal, Substrate modification in vibrational shifts induced by ^{13}C isotopic substitutions in adsorbed ethoxy determined by infrared spectroscopy and ab initio calculations: Cu(100) and W(110) 442 (1999) L1013

Y. Yan, M.F. Chisholm, S.J. Pennycook and S.T. Pantelides, Structures of pure and Ca-segregated MgO(001) surfaces 442 (1999) 251

A.M. Márquez, N. Lopez, M. García-Hernández and F. Illas, Similarities and differences in the Hartree–Fock and density-functional description of the chemisorption bond 442 (1999) 463

Atomistic dynamics

Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

Computer simulations

I.N. Yakovkin, V.I. Chernyi and A.G. Naumovets, Oxidation of CO on Li-precovered Pt 442 (1999) 81

V.F. Elesin and L.A. Openov, Clusters of interstitial carbon atoms near the graphite surface as a possible origin of dome-like features observed by scanning tunneling microscopy 442 (1999) 131

A. Bilič, B.V. King and D.J. O'Connor, Embedded atom method study of surface-confined Al on Ni(001) 442 (1999) 256

O.S. Trushin, K. Kokko and P.T. Salo, Film–substrate interface mixing in the energetic deposition of Ag on Cu(001) 442 (1999) 420

Density functional calculations

F. Delbecq and P. Sautet, NO chemisorption on a magnetic alloy surface: a density-functional periodic study of $Pd_3Mn(100)$ compared with Pd(100) 442 (1999) 338

I.N. Yakovkin, Non-metal-to-metal transition in alkaline earth monolayers 442 (1999) 431

Electron–solid interactions, scattering, diffraction

R.X. Ynzunza, F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1×1) oxygen on W(110) from full solid angle photoelectron diffraction with chemical-state resolution 442 (1999) 27

Equilibrium thermodynamics and statistical mechanics

M. Giesen, Scaling transition of the time dependence of step fluctuations on Cu(111) 442 (1999) 543

Ion–solid interactions, scattering, channeling

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Models of surface chemical reactions

Z.-M. Hu, K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90

Models of surface kinetics

M. Rak, Transient behaviour of surface supersaturation caused by variation in bulk supersaturation 442 (1999) 149

Z. Chvoj, H. Conrad and V. Cháb, Analysis of the Arrhenius shape of adatom diffusion coefficient in a surface model with two energy barriers 442 (1999) 455

Molecular dynamics

Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

V.F. Elesin and L.A. Openov, Clusters of interstitial carbon atoms near the graphite surface as a possible origin of dome-

like features observed by scanning tunneling microscopy 442 (1999) 131
O.S. Trushin, K. Kokko and P.T. Salo, Film–substrate interface mixing in the energetic deposition of Ag on Cu(001) 442 (1999) 420

Non-equilibrium thermodynamics and statistical mechanics

Z. Chvoj, H. Conrad and V. Cháb, Analysis of the Arrhenius shape of adatom diffusion coefficient in a surface model with two energy barriers 442 (1999) 455

Semi-empirical models and model calculations

A. Pojani, F. Finocchi and C. Noguera, Polarity on the $SrTiO_3$ (111) and (110) surfaces 442 (1999) 179
A. Bilić, B.V. King and D.J. O'Connor, Embedded atom method study of surface-confined Al on Ni(001) 442 (1999) 256
V.A. Ranea, J.L. Vicente, E.E. Mola and R. Uyewa Mananu, A theoretical study of water chemisorption on the (001) plane of V_2O_5 442 (1999) 498
Y. Fukuda, M. Shimomura, G. Kaneda, N. Sanada, V.G. Zavodinsky, I.A. Kuyanov and E.N. Chukurov, Scanning tunneling microscopy, high-resolution electron energy loss spectroscopy, and theoretical studies of trimethylphosphine (TMP) on a Si(111)-(7 × 7) surface 442 (1999) 507

EXPERIMENTAL SAMPLE PREPARATION AND CHARACTERIZATION METHODS

Atom–solid reactions

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1 × 2) 442 (1999) 47

Atomic force microscopy

S. Okita, M. Ishikawa and K. Miura, Nanotribological behavior of C_{60} films at an extremely low load 442 (1999) L959
K. Sangwal, P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161
T. Suzuki and R. Souda, Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS) 442 (1999) 283

Auger electron spectroscopy

M.S. Zei and G. Ertl, On the structural transformation of the reconstructed Pt(100) in electrolyte solutions 442 (1999) 19
S.G. Addepalli, B. Ekstrom, N.P. Magtoto, J.-S. Lin and J.A. Kelber, STM atomic-scale characterization of the γ′-Al_2O_3 film on Ni_3Al(111) 442 (1999) 385

Desorption induced by electronic transitions (DIET)

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Electron stimulated desorption (ESD)

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Photon stimulated desorption (PSD)

Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

Surface photochemistry

C. Bandis, L. Scudiero, S.C. Langford and J.T. Dickinson, Photoelectron emission studies of cleaved and excimer laser irradiated single-crystal surfaces of $NaNO_3$ and $NaNO_2$ 442 (1999) 413

Electrochemical methods

M.S. Zei and G. Ertl, On the structural transformation of the reconstructed Pt(100) in electrolyte solutions 442 (1999) 19
M. Lennartz, P. Broekmann, M. Arenz, C. Stuhlmann and K. Wandelt, Sulfate adsorption on Cu(111) studied by in-situ IRRAS and STM: revealing the adsorption site and desorption behavior 442 (1999) 215

Electron emission measurements

Field emission

P. Hądzel, T. Radoń, M.J.G. Lee and J.C.L. Chow, Surface density of states on the (0001) face of titanium 442 (1999) 36

Electron energy loss spectroscopy

J.A. Slezak, B.D. Zion and S.J. Sibener, Enhanced oxidation rate of Ni(111) by atomic oxygen 442 (1999) L983
G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
F. Müller, P. Steiner, Th. Straub, D. Reinicke, S. Palm, R. de Masi and S. Hüfner, Full hemispherical intensity maps of crystal field transitions in NiO(001) by angular resolved electron energy loss spectroscopy 442 (1999) 485
Y. Fukuda, M. Shimomura, G. Kaneda, N. Sanada, V.G. Zavodinsky, I.A. Kuyanov and E.N. Chukurov, Scanning tunneling microscopy, high-resolution electron energy loss spectroscopy, and theoretical studies of trimethylphosphine (TMP) on a Si(111)-(7 × 7) surface 442 (1999) 507

Electron microscopy

M. Mitome, In-situ observation of melting of fine lead particles by high-resolution electron microscopy 442 (1999) L953

Electron–solid diffraction

X. Zeng and H.E. Elsayed-Ali, Surface thermal expansion of Ge(111) 442 (1999) L977

Low energy electron diffraction (LEED)

I. Forbeaux, J.-M. Themlin and J.-M. Debever, High-temperature graphitization of the 6H-SiC (000$\bar{1}$) face 442 (1999) 9
M.S. Zei and G. Ertl, On the structural transformation of the reconstructed Pt(100) in electrolyte solutions 442 (1999) 19

R.X. Ynzunza, F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1 × 1) oxygen on W(110) from full solid angle photoelectron diffraction with chemical-state resolution 442 (1999) 27

J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223

A. Iglesias, M. Gierer, D. Wolf and W. Moritz, Ordering of subsurface interstitial atoms in the Ge(113) surface studied by SPA-LEED 442 (1999) 357

S.G. Addepalli, B. Ekstrom, N.P. Magtoto, J.-S. Lin and J.A. Kelber, STM atomic-scale characterization of the γ'-Al_2O_3 film on $Ni_3Al(111)$ 442 (1999) 385

F. Müller, P. Steiner, Th. Straub, D. Reinicke, S. Palm, R. de Masi and S. Hüfner, Full hemispherical intensity maps of crystal field transitions in NiO(001) by angular resolved electron energy loss spectroscopy 442 (1999) 485

Reflection high-energy electron diffraction (RHEED)

X. Zeng and H.E. Elsayed-Ali, Surface thermal expansion of Ge(111) 442 (1999) L977

T. Suzuki and R. Souda, Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS) 442 (1999) 283

T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Initial stage growth mechanisms of metal adsorbates – Ti, Zr, Fe, Ni, Ge, and Ag – on MgO(001) surface 442 (1999) 291

Ellipsometry

V.S. Aliev and V.N. Kruchinin, Development of Si(100) surface roughness at the initial stage of etching in F_2 and XeF_2 gases: ellipsometric study 442 (1999) 206

S.J. Roosendaal, B. van Asselen, J.W. Elsenaar, A.M. Vredenberg and F.H.P.M. Habraken, The oxidation state of Fe(100) after initial oxidation in O_2 442 (1999) 329

Ion scattering spectroscopy

High energy ion scattering (HEIS)

S.J. Roosendaal, B. van Asselen, J.W. Elsenaar, A.M. Vredenberg and F.H.P.M. Habraken, The oxidation state of Fe(100) after initial oxidation in O_2 442 (1999) 329

Low energy ion scattering (LEIS)

T. Suzuki and R. Souda, Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS) 442 (1999) 283

T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Initial stage growth mechanisms of metal adsorbates – Ti, Zr, Fe, Ni, Ge, and Ag – on MgO(001) surface 442 (1999) 291

Molecule–solid reactions

J.A. Slezak, B.D. Zion and S.J. Sibener, Enhanced oxidation rate of Ni(111) by atomic oxygen 442 (1999) L983

Photoelectron spectroscopy

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115

S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

Angle resolved photoemission

M. Hollering, F. Maier, N. Sieber, M. Stammler, J. Ristein, L. Ley, A.P.J. Stampfl, J.D. Riley, R.C.G. Leckey, F.P. Leisenberger and F.P. Netzer, Electronic states of an ordered oxide on C-terminated 6H–SiC 442 (1999) 531

Soft X-ray photoelectron spectroscopy (using synchrotron radiation)

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964

Visible and ultraviolet photoelectron spectroscopy

C. Bandis, L. Scudiero, S.C. Langford and J.T. Dickinson, Photoelectron emission studies of cleaved and excimer laser irradiated single-crystal surfaces of $NaNO_3$ and $NaNO_2$ 442 (1999) 413

X-ray photoelectron spectroscopy

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115

B. Bartlett, J.M. Valdisera and J.N. Russell, Jr., A comparison of the surface chemistry of phenyl cyanate and phenol on Al(111) 442 (1999) 265

S.J. Roosendaal, B. van Asselen, J.W. Elsenaar, A.M. Vredenberg and F.H.P.M. Habraken, The oxidation state of Fe(100) after initial oxidation in O_2 442 (1999) 329

C. Bandis, L. Scudiero, S.C. Langford and J.T. Dickinson, Photoelectron emission studies of cleaved and excimer laser irradiated single-crystal surfaces of $NaNO_3$ and $NaNO_2$ 442 (1999) 413

M. Hollering, F. Maier, N. Sieber, M. Stammler, J. Ristein, L. Ley, A.P.J. Stampfl, J.D. Riley, R.C.G. Leckey, F.P. Leisenberger and F.P. Netzer, Electronic states of an ordered oxide on C-terminated 6H–SiC 442 (1999) 531

Synchrotron radiation photoelectron spectroscopy

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964

R.X. Ynzunza, F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1 × 1) oxygen on W(110) from full solid angle photo-

electron diffraction with chemical-state resolution
442 (1999) 27

Photon absorption spectroscopy

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

S. Terada, T. Yokoyama, Y. Okamoto, M. Kiguchi, Y. Kitajima and T. Ohta, SO_2 adsorption on thin Pd/Ni(111) films studied by X-ray absorption fine structure spectroscopy 442 (1999) 141

Extended X-ray absorption fine structure (EXAFS)

S. D'Addato, C. Binns and P. Finetti, Surface extended X-ray absorption fine structure investigation of Fe islands grown on c(2 × 2) N/Cu(100) surface 442 (1999) 74

Infrared absorption spectroscopy

R. Ásmundsson and P. Uvdal, Substrate modification in vibrational shifts induced by ^{13}C isotopic substitutions in adsorbed ethoxy determined by infrared spectroscopy and ab initio calculations: Cu(100) and W(110) 442 (1999) L1013

Near edge extended X-ray absorption fine structure (NEXAFS)

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964

A.B. Gurevich, B.E. Bent, A.V. Teplyakov and J.G. Chen, A NEXAFS investigation of the formation and decomposition of CuO and Cu_2O thin films on Cu(100) 442 (1999) L971

S. Terada, T. Yokoyama, Y. Okamoto, M. Kiguchi, Y. Kitajima and T. Ohta, SO_2 adsorption on thin Pd/Ni(111) films studied by X-ray absorption fine structure spectroscopy 442 (1999) 141

Surface extended X-ray absorption fine structure (SEXAFS)

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

S. Terada, T. Yokoyama, Y. Okamoto, M. Kiguchi, Y. Kitajima and T. Ohta, SO_2 adsorption on thin Pd/Ni(111) films studied by X-ray absorption fine structure spectroscopy 442 (1999) 141

X-ray absorption spectroscopy

J.A. Rodriguez, T. Jirsak, S. Chaturverdi and M. Kuhn, Reaction of SO_2 with ZnO(000$\bar{1}$)–O and ZnO powders: photoemission and XANES studies on the formation of SO_3 and SO_4 442 (1999) 400

Reflection spectroscopy

I.A. McLure and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374

Scanning tunneling microscopy

S.M. Driver and D.P. Woodruff, Nitrogen-induced pseudo-(100) reconstruction of the Cu(111) surface identified by STM 442 (1999) 1

A.T.S. Wee, R.A. Dixon, R.G. Egdell, J.S. Foord, T.W. Fishlock and J.B. Pethica, Scanning tunnelling microscopy study of palladium on stepped Cu(210) surfaces: chemical contrast and room-temperature tip-induced motion 442 (1999) 55

N. Sato, T. Nagao and S. Hasegawa, Si(111)-($\sqrt{3} \times \sqrt{3}$)-Ag surface at low temperatures: symmetry breaking and surface twin boundaries 442 (1999) 65

T. Fukuda, Initial surface reconstructions on solid-phase homoepitaxially grown amorphous silicon overlayers on Si(111)-7 × 7 surface 442 (1999) 107

X. Zhao, R.G. Zhao and W.S. Yang, Adsorption of alanine on Cu(001) studied by scanning tunneling microscopy 442 (1999) L995

H. Wang, C. Zeng, Q. Li, B. Wang, J. Yang, J.G. Hou and Q. Zhu, Scanning tunneling spectroscopy of individual C_{60} molecules adsorbed on Si(111)-7 × 7 surface 442 (1999) L1024

J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223

T. Ohgi, H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277

K. Kushida, K. Hattori, S. Arai, T. Iimori and F. Komori, Initial stage of Ag growth on Ge(001) surfaces at room temperature 442 (1999) 300

S.-J. Kahng, J.-Y. Park and Y. Kuk, Kinetics processes in the growth and decomposition of a two-dimensional binary alloy 442 (1999) 379

S.G. Addepalli, B. Ekstrom, N.P. Magtoto, J.-S. Lin and J.A. Kelber, STM atomic-scale characterization of the γ'-Al_2O_3 film on $Ni_3Al(111)$ 442 (1999) 385

M. Giesen, Scaling transition of the time dependence of step fluctuations on Cu(111) 442 (1999) 543

Scanning tunneling spectroscopies

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1 × 2) 442 (1999) 47

N. Sato, T. Nagao and S. Hasegawa, Si(111)-($\sqrt{3} \times \sqrt{3}$)-Ag surface at low temperatures: symmetry breaking and surface twin boundaries 442 (1999) 65

H. Wang, C. Zeng, Q. Li, B. Wang, J. Yang, J.G. Hou and Q. Zhu, Scanning tunneling spectroscopy of individual C_{60} molecules adsorbed on Si(111)-7 × 7 surface 442 (1999) L1024

Y. Fukuda, M. Shimomura, G. Kaneda, N. Sanada, V.G. Zavodinsky, I.A. Kuyanov and E.N. Chukurov, Scanning tunneling microscopy, high-resolution electron energy loss spectroscopy, and theoretical studies of trimethylphosphine (TMP) on a Si(111)-(7 × 7) surface 442 (1999) 507

Thermal desorption spectroscopy

B. Bartlett, J.M. Valdisera and J.N. Russell, Jr., A comparison of the surface chemistry of phenyl cyanate and phenol on Al(111) 442 (1999) 265
K. Yagi, D. Sekiba and H. Fukutani, Adsorption and desorption kinetics of oxygen on the Pd(110) surface 442 (1999) 307
S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

Work function measurements

S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

X-ray scattering, diffraction, and reflection

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948
M. Nielsen, R. Feidenhans'l, P.B. Howes, J. Vedde, K. Rasmussen, M. Benamara and F. Grey, The interface structure in directly bonded silicon crystals studied by synchrotron X-ray diffraction 442 (1999) L989
H.L. Meyerheim, Th. Gloege and H. Maltor, Surface X-ray diffraction on large organic molecules: thiouracil on Ag(111) 442 (1999) L1029
M. Sacchi, A. Mirone and S. Iacobucci, Soft X-ray resonant magnetic scattering from thin Ni layers on Cu(110) 442 (1999) 349

PHENOMENA

Adhesion

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964
J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1 × 2) 442 (1999) 47
B. Bartlett, J.M. Valdisera and J.N. Russell, Jr., A comparison of the surface chemistry of phenyl cyanate and phenol on Al(111) 442 (1999) 265

Atom emission

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Atom–solid interactions

Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

Catalysis

Z.-M. Hu, K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90
G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
H. Amandusson, L.-G. Ekedahl and H. Dannetun, Methanol-induced hydrogen permeation through a palladium membrane 442 (1999) 199

Chemisorption

S.M. Driver and D.P. Woodruff, Nitrogen-induced pseudo-(100) reconstruction of the Cu(111) surface identified by STM 442 (1999) 1
Z.-M. Hu, K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90
G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
R. Ásmundsson and P. Uvdal, Substrate modification in vibrational shifts induced by ^{13}C isotopic substitutions in adsorbed ethoxy determined by infrared spectroscopy and ab initio calculations: Cu(100) and W(110) 442 (1999) L1013
F. Delbecq and P. Sautet, NO chemisorption on a magnetic alloy surface: a density-functional periodic study of Pd_3Mn(100) compared with Pd(100) 442 (1999) 338
N.K. Singh and R. Krout, Thermal and electron-induced reactions of $AsCl_3$ on GaAs(100) 442 (1999) 442
A.M. Márquez, N. Lopez, M. García-Hernández and F. Illas, Similarities and differences in the Hartree–Fock and density-functional description of the chemisorption bond 442 (1999) 463
V.A. Ranea, J.L. Vicente, E.E. Mola and R. Uyewa Mananu, A theoretical study of water chemisorption on the (001) plane of V_2O_5 442 (1999) 498
Y. Fukuda, M. Shimomura, G. Kaneda, N. Sanada, V.G. Zavodinsky, I.A. Kuyanov and E.N. Chukurov, Scanning tunneling microscopy, high-resolution electron energy loss spectroscopy, and theoretical studies of trimethylphosphine (TMP) on a Si(111)-(7 × 7) surface 442 (1999) 507
S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

Compound formation

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115

Crystallization

T. Fukuda, Initial surface reconstructions on solid-phase homoepitaxially grown amorphous silicon overlayers on Si(111)-7 × 7 surface 442 (1999) 107
M. Rak, Transient behaviour of surface supersaturation caused by variation in bulk supersaturation 442 (1999) 149

Diffusion and migration

I. Forbeaux, J.-M. Themlin and J.-M. Debever, High-temperature graphitization of the 6H-SiC (000$\bar{1}$) face 442 (1999) 9
T. Ohgi, H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277

Electron emission

F. Klar, J. Bansmann, H. Glaefeke, H.-J. Fitting and K.-H. Meiwes-Broer, Exoelectron emission from magnesium surfaces 442 (1999) 477

Electron stimulated desorption

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Energy dissipation

S. Okita, M. Ishikawa and K. Miura, Nanotribological behavior of C_{60} films at an extremely low load 442 (1999) L959

Epitaxy

J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223
T. Ohgi, H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277
T. Suzuki and R. Souda, Structure analysis of CsCl deposited on the MgO(001) surface by coaxial impact collision atom scattering spectroscopy (CAICASS) 442 (1999) 283
T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Initial stage growth mechanisms of metal adsorbates – Ti, Zr, Fe, Ni, Ge, and Ag – on MgO(001) surface 442 (1999) 291
F. Müller, P. Steiner, Th. Straub, D. Reinicke, S. Palm, R. de Masi and S. Hüfner, Full hemispherical intensity maps of crystal field transitions in NiO(001) by angular resolved electron energy loss spectroscopy 442 (1999) 485

Faceting

X. Zhao, R.G. Zhao and W.S. Yang, Adsorption of alanine on Cu(001) studied by scanning tunneling microscopy 442 (1999) L995

Growth

I. Forbeaux, J.-M. Themlin and J.-M. Debever, High-temperature graphitization of the 6H-SiC (000$\bar{1}$) face 442 (1999) 9
S. D'Addato, C. Binns and P. Finetti, Surface extended X-ray absorption fine structure investigation of Fe islands grown on c(2 × 2) N/Cu(100) surface 442 (1999) 74
M. Rak, Transient behaviour of surface supersaturation caused by variation in bulk supersaturation 442 (1999) 149
J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223
K. Kushida, K. Hattori, S. Arai, T. Iimori and F. Komori, Initial stage of Ag growth on Ge(001) surfaces at room temperature 442 (1999) 300
O.S. Trushin, K. Kokko and P.T. Salo, Film–substrate interface mixing in the energetic deposition of Ag on Cu(001) 442 (1999) 420
F. Müller, P. Steiner, Th. Straub, D. Reinicke, S. Palm, R. de Masi and S. Hüfner, Full hemispherical intensity maps of crystal field transitions in NiO(001) by angular resolved electron energy loss spectroscopy 442 (1999) 485

Interface states

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964

Ion emission

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939

Ion–solid interactions

L. Markowski, Isotope effect in electron-stimulated desorption: Li^+ emission from LiF on Si(100) 442 (1999) L939
Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

Luminescence

Photoluminescence

I.A. McLure and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374

Nucleation

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1 × 2) 442 (1999) 47

Oxidation

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964
A.B. Gurevich, B.E. Bent, A.V. Teplyakov and J.G. Chen, A NEXAFS investigation of the formation and decomposition of CuO and Cu_2O thin films on Cu(100) 442 (1999) L971

J.A. Slezak, B.D. Zion and S.J. Sibener, Enhanced oxidation rate of Ni(111) by atomic oxygen 442 (1999) L983
I.N. Yakovkin, V.I. Chernyi and A.G. Naumovets, Oxidation of CO on Li-precovered Pt 442 (1999) 81
J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223
S.J. Roosendaal, B. van Asselen, J.W. Elsenaar, A.M. Vredenberg and F.H.P.M. Habraken, The oxidation state of Fe(100) after initial oxidation in O_2 442 (1999) 329

Photochemistry

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115

Photoelectron diffraction

R.X. Ynzunza, F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1×1) oxygen on W(110) from full solid angle photoelectron diffraction with chemical-state resolution 442 (1999) 27

Photoelectron emission

P. Hądzel, T. Radoń, M.J.G. Lee and J.C.L. Chow, Surface density of states on the (0001) face of titanium 442 (1999) 36

Physical adsorption

S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

Radiation damage

C. Bandis, L. Scudiero, S.C. Langford and J.T. Dickinson, Photoelectron emission studies of cleaved and excimer laser irradiated single-crystal surfaces of $NaNO_3$ and $NaNO_2$ 442 (1999) 413

Self-assembly

S. D'Addato, C. Binns and P. Finetti, Surface extended X-ray absorption fine structure investigation of Fe islands grown on c(2 × 2) N/Cu(100) surface 442 (1999) 74
T. Ohgi, H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277

Sintering

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1 × 2) 442 (1999) 47

Sputtering

Step formation and bunching

M. Sato and M. Uwaha, Growth of step bunches formed by the drift of adatoms 442 (1999) 318

Surface chemical reaction

J.A. Slezak, B.D. Zion and S.J. Sibener, Enhanced oxidation rate of Ni(111) by atomic oxygen 442 (1999) L983
I.N. Yakovkin, V.I. Chernyi and A.G. Naumovets, Oxidation of CO on Li-precovered Pt 442 (1999) 81
Z.-M. Hu, K. Takahashi and H. Nakatsuji, Mechanism of the hydrogenation of CO_2 to methanol on a Cu(100) surface: dipped adcluster model study 442 (1999) 90
B. Bartlett, J.M. Valdisera and J.N. Russell, Jr., A comparison of the surface chemistry of phenyl cyanate and phenol on Al(111) 442 (1999) 265
J.A. Rodriguez, T. Jirsak, S. Chaturverdi and M. Kuhn, Reaction of SO_2 with ZnO(000$\bar{1}$)–O and ZnO powders: photoemission and XANES studies on the formation of SO_3 and SO_4 442 (1999) 400
N.K. Singh and R. Krout, Thermal and electron-induced reactions of $AsCl_3$ on GaAs(100) 442 (1999) 442
F. Klar, J. Bansmann, H. Glaefeke, H.-J. Fitting and K.-H. Meiwes-Broer, Exoelectron emission from magnesium surfaces 442 (1999) 477

Surface diffusion

M. Rak, Transient behaviour of surface supersaturation caused by variation in bulk supersaturation 442 (1999) 149
K. Sangwal, P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161
A. Bilić, B.V. King and D.J. O'Connor, Embedded atom method study of surface-confined Al on Ni(001) 442 (1999) 256
T. Ohgi, H.-Y. Sheng, Z.-C. Dong and H. Nejoh, Observation of Au deposited self-assembled monolayers of octanethiol by scanning tunneling microscopy 442 (1999) 277
M. Sato and M. Uwaha, Growth of step bunches formed by the drift of adatoms 442 (1999) 318
Z. Chvoj, H. Conrad and V. Cháb, Analysis of the Arrhenius shape of adatom diffusion coefficient in a surface model with two energy barriers 442 (1999) 455
M. Giesen, Scaling transition of the time dependence of step fluctuations on Cu(111) 442 (1999) 543

Surface electronic phenomena (work function, surface potential, surface states, etc.)

S. Andersson, P.A. Brühwiler, A. Sandell, M. Frank, J. Libuda, A. Giertz, B. Brena, A.J. Maxwell, M. Bäumer, H.-J. Freund and N. Mårtensson, Metal–oxide interaction for metal clusters on a metal-supported thin alumina film 442 (1999) L964
I. Forbeaux, J.-M. Themlin and J.-M. Debever, High-temperature graphitization of the 6H-SiC (000$\bar{1}$) face 442 (1999) 9
P. Hądzel, T. Radoń, M.J.G. Lee and J.C.L. Chow, Surface density of states on the (0001) face of titanium 442 (1999) 36
I.N. Yakovkin, Non-metal-to-metal transition in alkaline earth monolayers 442 (1999) 431

Surface energy

A. Pojani, F. Finocchi and C. Noguera, Polarity on the $SrTiO_3$ (111) and (110) surfaces 442 (1999) 179

Surface melting

M. Mitome, In-situ observation of melting of fine lead particles by high-resolution electron microscopy 442 (1999) L953

Surface relaxation and reconstruction

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

X. Zeng and H.E. Elsayed-Ali, Surface thermal expansion of Ge(111) 442 (1999) L977

N. Sato, T. Nagao and S. Hasegawa, Si(111)-$(\sqrt{3}\times\sqrt{3})$-Ag surface at low temperatures: symmetry breaking and surface twin boundaries 442 (1999) 65

K. Sangwal, P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161

A. Pojani, F. Finocchi and C. Noguera, Polarity on the $SrTiO_3$ (111) and (110) surfaces 442 (1999) 179

Surface roughening

V.S. Aliev and V.N. Kruchinin, Development of Si(100) surface roughness at the initial stage of etching in F_2 and XeF_2 gases: ellipsometric study 442 (1999) 206

Surface segregation

I.A. McLure and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374

S.-J. Kahng, J.-Y. Park and Y. Kuk, Kinetics processes in the growth and decomposition of a two-dimensional binary alloy 442 (1999) 379

Surface stress

K. Sangwal, P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161

Surface structure, morphology, roughness, and topography

Z.H. Lu, T. Tyliszczak, A.P. Hitchcock and M.W.C. Dharmawardana, Structure of the Cl-passivated Ge(111) surface determined using X-ray absorption and first principles calculations 442 (1999) L948

X. Zeng and H.E. Elsayed-Ali, Surface thermal expansion of Ge(111) 442 (1999) L977

M. Nielsen, R. Feidenhans'l, P.B. Howes, J. Vedde, K. Rasmussen, M. Benamara and F. Grey, The interface structure in directly bonded silicon crystals studied by synchrotron X-ray diffraction 442 (1999) L989

S.M. Driver and D.P. Woodruff, Nitrogen-induced pseudo-(100) reconstruction of the Cu(111) surface identified by STM 442 (1999) 1

R.X. Ynzunza, F.J. Palomares, E.D. Tober, Z. Wang, J. Morais, R. Denecke, H. Daimon, Y. Chen, Z. Hussain, M.A. Van Hove and C.S. Fadley, Structure determination for saturated (1×1) oxygen on W(110) from full solid angle photoelectron diffraction with chemical-state resolution 442 (1999) 27

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on TiO_2(110)-(1×2) 442 (1999) 47

N. Sato, T. Nagao and S. Hasegawa, Si(111)-$(\sqrt{3}\times\sqrt{3})$-Ag surface at low temperatures: symmetry breaking and surface twin boundaries 442 (1999) 65

T. Fukuda, Initial surface reconstructions on solid-phase homoepitaxially grown amorphous silicon overlayers on Si(111)-7×7 surface 442 (1999) 107

X. Zhao, R.G. Zhao and W.S. Yang, Adsorption of alanine on Cu(001) studied by scanning tunneling microscopy 442 (1999) L995

Y. Ashkenazy, I. Kelson, H.H. Bertschat, K. Potzger, A. Weber, W.-D. Zeitz and ISOLDE-Collaboration at CERN, Nuclear stimulated desorption of isolated cadmium atoms from structured surfaces 442 (1999) L1001

H. Nishimura, H. Minoda, Y. Tanishiro and K. Yagi, DC heating-induced step instability on Si(001) vicinal surfaces 442 (1999) L1006

K. Sangwal, P. Gorostiza and F. Sanz, In situ study of the recovery of nanoindentation deformation of the (100) face of MgO crystals by atomic force microscopy 442 (1999) 161

J. Karunamuni, R.L. Kurtz and R.L. Stockbauer, Growth of iron oxide on Cu(001) at elevated temperature 442 (1999) 223

Y. Yan, M.F. Chisholm, S.J. Pennycook and S.T. Pantelides, Structures of pure and Ca-segregated MgO(001) surfaces 442 (1999) 251

T. Suzuki, S. Hishita, K. Oyoshi and R. Souda, Initial stage growth mechanisms of metal adsorbates – Ti, Zr, Fe, Ni, Ge, and Ag – on MgO(001) surface 442 (1999) 291

K. Kushida, K. Hattori, S. Arai, T. Iimori and F. Komori, Initial stage of Ag growth on Ge(001) surfaces at room temperature 442 (1999) 300

M. Sato and M. Uwaha, Growth of step bunches formed by the drift of adatoms 442 (1999) 318

H.L. Meyerheim, Th. Gloege and H. Maltor, Surface X-ray diffraction on large organic molecules: thiouracil on Ag(111) 442 (1999) L1029

A. Iglesias, M. Gierer, D. Wolf and W. Moritz, Ordering of subsurface interstitial atoms in the Ge(113) surface studied by SPA-LEED 442 (1999) 357

M. Hollering, F. Maier, N. Sieber, M. Stammler, J. Ristein, L. Ley, A.P.J. Stampfl, J.D. Riley, R.C.G. Leckey, F.P. Leisenberger and F.P. Netzer, Electronic states of an ordered oxide on C-terminated 6H–SiC 442 (1999) 531

Surface thermodynamics (including phase transitions)

M. Lennartz, P. Broekmann, M. Arenz, C. Stuhlmann and K. Wandelt, Sulfate adsorption on Cu(111) studied by in-situ

IRRAS and STM: revealing the adsorption site and desorption behavior 442 (1999) 215
M. Giesen, Scaling transition of the time dependence of step fluctuations on Cu(111) 442 (1999) 543

Thermal desorption

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
K. Yagi, D. Sekiba and H. Fukutani, Adsorption and desorption kinetics of oxygen on the Pd(110) surface 442 (1999) 307
N.K. Singh and R. Krout, Thermal and electron-induced reactions of $AsCl_3$ on GaAs(100) 442 (1999) 442
S. Turton, M. Kadodwala and R.G. Jones, Molecular and dissociative adsorption of 1-bromo-2-chloroethane on Cu(111) 442 (1999) 517

Tribology

S. Okita, M. Ishikawa and K. Miura, Nanotribological behavior of C_{60} films at an extremely low load 442 (1999) L959

Vibrations of adsorbed molecules

G. Klivényi, I. Kovács and F. Solymosi, Thermal and photo-induced dissociation of $(C_2H_5)_2Zn$ on Rh(111) surface 442 (1999) 115
R. Ásmundsson and P. Uvdal, Substrate modification in vibrational shifts induced by ^{13}C isotopic substitutions in adsorbed ethoxy determined by infrared spectroscopy and ab initio calculations: Cu(100) and W(110) 442 (1999) L1013

Wetting

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on $TiO_2(110)$-(1×2) 442 (1999) 47
I.A. McLure and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374

J. Biener, J. Wang and R.J. Madix, Direct observation of the growth of vanadium on $TiO_2(110)$-(1×2) 442 (1999) 47
I.A. McLure and P.J. Quail (née Clements), Wetting in narrow gaps and capillaries: temperature- and surface-pressure-induced wetting transitions: a comment 442 (1999) 374